

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Akio ITO; Yukiko MURASAWA; Hideaki
TAKAHASHI

Application No.: New U.S. Patent Application

Filed: April 3, 2001

Docket No.: 109135

For: IONIZING RADIATION CURABLE INK FOR INK JET PRINTING AND PRINTED
PRODUCT OF THE SAME

PRELIMINARY AMENDMENT

Director of the U.S. Patent and Trademark Office
Washington, D. C. 20231

Sir:

Prior to initial examination, please amend the above-identified application as follows:

IN THE SPECIFICATION:

Page 3, lines 11-16, delete current paragraph and insert therefor:

The present invention accomplished based on the above finding is an ink comprising:
at least a colorant; and a resin liquid containing at least one photoreactive monofunctional
monomer or at least one photoreactive bifunctional monomer, wherein a viscosity of the resin
liquid at 25°C is 1.0 mPa's or more but 10.5 mPa's or less.

Page 4, lines 11-21, delete current paragraph and insert therefor:

The present invention is a printed product comprising: an ink-receiving layer
containing as a main component at least one resin selected from a group consisting of
polyester resin, styrene-acrylic resin, epoxy resin, and phenoxy resin, and being formed an
image on a surface of the ink-receiving layer, wherein the image is made with an ink

comprising at least a colorant, and a resin liquid containing at least one photoreactive bifunctional monofunctional monomer or at least one photoreactive bifunctional monomer, wherein a viscosity of the resin liquid at 25°C is 1.0 mPa's or more but 10.5 mPa's or less.

IN THE CLAIMS:

Please replace claims 1 and 7 as follows:

1. (Amended) An ink comprising: at least a colorant; and a resin liquid containing at least one photoreactive monofunctional monomer or at least one photoreactive bifunctional monomer, wherein a viscosity of the resin liquid at 25°C is 1.0 mPa's or more but 10.5 mPa's or less.
7. (Amended) A printed product comprising: an ink-receiving layer containing as a main component at least one resin selected from a group consisting of polyester resin, styrene-acrylic resin, epoxy resin, and phenoxy resin, and being formed an image on a surface of the ink-receiving layer, wherein the image is made with an ink comprising at least a colorant, and a resin liquid containing at least one photoreactive monofunctional monomer or at least one photoreactive bifunctional monomer, wherein a viscosity of the resin liquid at 25°C is 1.0 mPa's or more but 10.5 mPa's or less.

REMARKS

The attached Appendix includes marked-up copies of each rewritten paragraph (37 C.F.R. 1.121(b)(iii)) and claim (37 C.F.R. 1.121(c)(ii)).

Claims 1-13 are pending. Claims 1 and 7 are amended. Prompt and favorable consideration on the merits is respectfully requested.

Respectfully submitted,



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JAO:TJP/kaf

Attachment:
Appendix

Date: April 3, 2001

OLIFF & BERRIDGE, PLC
P.O. Box 19928
Alexandria, Virginia 22320
Telephone: (703) 836-6400

DEPOSIT ACCOUNT USE AUTHORIZATION Please grant any extension necessary for entry; Charge any fee due to our Deposit Account No. 15-0461
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APPENDIX

Changes to Specification:

The following are marked-up versions of the amended paragraphs:

Page 3, lines 11-16:

The present invention accomplished based on the above finding is an ink comprising: at least a colorant; and a resin liquid containing ~~either~~ at least a one photoreactive monofunctional monomer or at least a one photoreactive bifunctional monomer, wherein a viscosity of the resin liquid at 25°C is 1.0 mPa's or more but 10.5 mPa's or less.

Page 4, lines 11-21:

The present invention is a printed product comprising: an ink-receiving layer containing as a main component at least one resin selected from a group consisting of polyester resin, styrene-acrylic resin, epoxy resin, and phenoxy resin, and being formed an image on a surface of the ink-receiving layer, wherein the image is made with an ink comprising at least a colorant, and a resin liquid containing ~~either~~ at least a one photoreactive bifunctional monofunctional monomer or at least a one photoreactive bifunctional monomer, wherein a viscosity of the resin liquid at 25°C is 1.0 mPa's or more but 10.5 mPa's or less.

Changes to Claims:

The following are marked-up versions of the amended claims:

1. (Amended) An ink comprising: at least a colorant; and a resin liquid containing ~~either~~ at least a one photoreactive monofunctional monomer or at least a one photoreactive bifunctional monomer, wherein a viscosity of the resin liquid at 25°C is 1.0 mPa's or more but 10.5 mPa's or less.

7. (Amended) A printed product comprising: an ink-receiving layer containing as a main component at least one resin selected from a group consisting of polyester resin, styrene-acrylic resin, epoxy resin, and phenoxy resin, and being formed an image on a surface

of the ink-receiving layer, wherein the image is made with an ink comprising at least a colorant, and a resin liquid containing either at least a one photoreactive monofunctional monomer or at least a one photoreactive bifunctional monomer, wherein a viscosity of the resin liquid at 25°C is 1.0 mPa's or more but 10.5 mPa's or less.

Parameter	Value	Unit
α	0.01	deg
β	0.01	deg
γ	0.01	deg
δ	0.01	deg
ϵ	0.01	deg
ζ	0.01	deg
η	0.01	deg
θ	0.01	deg
ϕ	0.01	deg
χ	0.01	deg
ψ	0.01	deg
ω	0.01	deg
ν	0.01	deg
μ	0.01	deg
λ	0.01	deg
κ	0.01	deg
ι	0.01	deg
\hbar	0.01	deg
g	0.01	deg
f	0.01	deg
e	0.01	deg
d	0.01	deg
c	0.01	deg
b	0.01	deg
a	0.01	deg
z	0.01	deg
y	0.01	deg
x	0.01	deg
w	0.01	deg
v	0.01	deg
u	0.01	deg
t	0.01	deg
s	0.01	deg
r	0.01	deg
q	0.01	deg
p	0.01	deg
o	0.01	deg
n	0.01	deg
m	0.01	deg
l	0.01	deg
k	0.01	deg
j	0.01	deg
i	0.01	deg
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b	0.01	deg
a	0.01	deg
z	0.01	deg
y	0.01	deg
x	0.01	deg
w	0.01	deg
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m	0.01	deg
l	0.01	deg